Thews: Quarkonium Formation By Recombination

Multiple $c\overline{c}$ production at colliders allows a c and a \overline{c} from uncorrelated $c\overline{c}$ pairs, produced in different, independent hard scatterings, to make a J/ψ

 J/ψ 's formed in the medium have narrower y and p_T distributions than those from initial production so instead of $\langle p_T^2 \rangle$ increasing from pp to d+Au to Au+Au, the Au+Au result should be lower than d+Au, even narrower if charm quarks thermalize Prediction of narrowing $\langle p_T^2 \rangle$ is more robust than amount of secondary formation

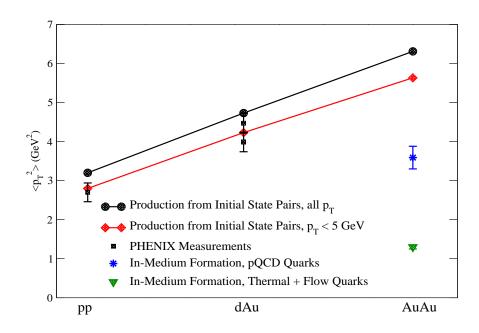


Figure 1: Evolution of J/ψ average p_T^2 with system size.